



Amine acid zwitterion additive for a cathodic electrocoating composition

Description of Technology: This invention is directed to an electrocoating composition having an improved cure that uses a blocked isocyanate crosslinking agent blocked with a non-hazardous and non-air polluting compound.

Patent Listing:

1. **US Patent No. 6,811,666**, Issued November 2, 2004, "Amine acid zwitterion additive for a cathodic electrocoating composition"

<http://patft.uspto.gov/netacgi/nph-Parser?Sect2=PTO1&Sect2=HITOFF&p=1&u=%2Fnetacgi%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&d=PALL&RefSrch=yes&Query=PN%2F6811666>

Market Potential: Coating of electrically conductive substrates by an electrodeposition process (also called an electrocoating process) is well known and an important industrial process used particularly in the manufacture of automobiles and trucks. In the electrodeposition of primers, an article, such as an auto body or truck body or parts thereof, is immersed in an aqueous electrocoating bath of an electrocoating composition that contains an aqueous emulsion of a film forming polymer. The article to be electrocoated acts as an electrode resulting in an electrical current being passed between the article and a counter electrode, which is in contact with the aqueous emulsion, until a coating with the desired thickness is deposited on the article. In a cathodic electrocoating process, the article to be coated is the cathode and the counter electrode is the anode. The article to be coated is immersed and passed through the bath over a period of time (time in the bath controls the thickness of the coating that is deposited) and then the coated article is removed from the bath, rinsed with water and baked to form a primer coating on the article.

Benefits:

- Permits the desired thickness of coating to be deposited on the article

Applications:

- Electrocoating composition

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